

Appl. No. 10/627,785
Amdt Dated Sep. 19, 2005
Reply to Office Action Jun. 1, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A heat sink clip for attaching a heat sink to an electronic package that is mounted on a socket, the heat sink clip comprising:

a main body comprising a longitudinal portion and first and second locking arms extending downwardly from opposite ends of the longitudinal portion, the longitudinal portion defining a through aperture therein, each of the locking arms having engaging means adapted to engage with the socket;

a post extending through the through aperture of the longitudinal portion, the post having a pressing portion at a bottom thereof ~~adapted for being~~ fittingly received in a mating portion defined in the heat sink; and

a resilient element being arranged around the post and between the pressing portion and the longitudinal portion of the main body.

Claim 2 (original): The heat sink clip as described in claim 1, wherein the second arm is detachably engaged with a corresponding end of the longitudinal portion.

Claim 3 (original): The heat sink clip as described in claim 1, wherein the second arm comprises a handle at an end thereof.

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Claim 4 (original): The heat sink clip as described in claim 1, wherein a diameter of the pressing portion is greater than a diameter of a main shaft of the post, and is also greater than a diameter of the resilient element.

Claim 5 (original): The heat sink clip as described in claim 4, wherein the pressing portion comprises a cap that is inferentially engaged with the main shaft of the post.

Claim 6 (original): The heat sink clip as described in claim 4, wherein the pressing portion comprises a cap that is threadedly engaged with the main shaft of the post.

Claim 7 (original): The heat sink clip as described in claim 1, wherein a diameter of the through aperture is slightly greater than a diameter of the main shaft of the post, and less than a diameter of the resilient element.

Claim 8 (original): The heat sink clip as described in claim 1, wherein the post comprises a heat at a top thereof.

Claim 9 (original): The heat sink clip as described in claim 1, wherein the resilient element is a spring.

Claim 10 (currently amended): A heat sink assembly comprising:
a heat sink having a mating portion defined therein;

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a support module having first engaging means; and

a clip adapted to attach the heat sink onto an electronic package, the clip comprising a main body, a post, and a resilient element, the main body comprising a longitudinal portion, first and second locking arms extending downwardly from opposite ends of the longitudinal portion, the longitudinal portion defining a through aperture, each of the locking arms defining second engaging means to engage with the first engaging means of the support module, the post extending through the through aperture of the longitudinal portion and having a pressing portion at a bottom thereof ~~adapted for being~~ fittingly received in the mating portion of the heat sink, wherein the resilient element is disposed around the post below the longitudinal portion.

Claim 11 (original): The heat sink assembly as described in claim 10, wherein a diameter of the pressing portion is greater than a diameter of a main shaft of the post, and is also greater than a diameter of the resilient element.

Claim 12 (original): The heat sink assembly as described in claim 10, wherein the resilient element abuts against the pressing portion.

Claim 13 (original): The heat sink assembly as described in claim 10, wherein the first and second engaging means respectively comprises catches and hooks.

Claim 14 (original): The heat sink assembly as described in claim 10,

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wherein the resilient element is a spring.

Claim 15 (original): The heat sink assembly as described in claim 10, wherein the post comprises a head at a top thereof.

Claim 16 (original): The heat sink assembly as described in claim 11, wherein the pressing portion comprises a cap that is inferentially engaged with the main shaft of the post.

Claim 17 (original): The heat sink assembly as described in claim 11, wherein the pressing portion comprises a cap that is threadedly engaged with the main shaft of the post.

Claim 18 (currently amended): A heat sink assembly comprising:
a heat sink defining an elongated slot;
a heat generating device on which the heat sink is seated;
an electrical device located under the heat generating device with locking devices thereon;

a clip including a longitudinal portion located in the slot, with two opposite locking arms respectively located at two opposite ends thereof and latchably engaged with the corresponding locking devices, respectively;

a post located on a middle portion of the longitudinal portion and vertically moveable relative thereto; and

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a compressed coil spring surrounding said post with an upper end upwardly abutting against the middle portion and a lower end downwardly abutting against a lower end of the post;

wherein the lower end of the post imposes forces upon the heat sink due to compression of said coil spring;

wherein said lower end of the post is located in a hole of the heat sink under said slot.

Claim 19 (cancelled)

Claim 20 (new): The heat sink clip as described in claim 1, wherein the mating portion of the heat sink is a blind hole.

Claim 21 (new): The heat sink assembly as described in claim 10, wherein the mating portion of the heat sink is a blind hole.